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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,415	11/19/2003	Gunnar Behrens	HK-815	7259

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EXAMINER

MORRISON, THOMAS A

ART UNIT	PAPER NUMBER
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3653

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/22/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/717,415	Applicant(s) BEHRENS ET AL.	
	Examiner Thomas A. Morrison	Art Unit 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The drawing was received on 11/20/2006. This drawings (i.e., new Figure 2) has not been entered, because it introduces new matter. In particular, new Fig. 2 shows details of how a vacuum pump 64 is arranged and connected to an exposure drum 1, which is not supported by the disclosure of the instant application. Thus, the new drawing (i.e., Fig. 2) has not been entered.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, (1) the vacuum pump recited in claim 1 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. If future changes are made to the drawings, the changes to the specification need to match the changes to such drawings (e.g., reference numeral 64 for the vacuum pump in the specification).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the

renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

3. Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 11, it is noted that claim 6 recites "valves disposed in a **valve block**". (emphasis added). After this, claim 11 recites "The apparatus according to claim 6, further comprising a **valve block**". (emphasis added). It is unclear if the recited "a valve block" in claim 11 is the same or different from the previously recited "a valve block" in claim 6.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-12, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,038,976 (Helmstadter et al.).

Regarding claim 1, Figs. 1-3 and 6 disclose a method for controlling vacuum distribution in an exposer (Fig. 1) for recording printing originals, which comprises the steps of:

holding firmly a recording material of a printing original on a supporting surface by vacuum (see Abstract), the recording material being attracted by suction by a vacuum pump (33) through suction grooves (44) machined into the supporting surface and through suction ducts (including 71) connected to the suction grooves (44); and

opening and closing the suction ducts (including 71) by manipulating valves (Fig. 6), the valves (Fig. 6) being closed by a force (e.g., compressed air from portion 57) from a mechanical actuator (including 52), and the valves (Fig. 6) being opened by an action of compressed air (column 9, lines 42-55) on a piston (column 11, line 33) in each of the valves (Fig. 6).

Regarding claim 2, Fig. 2 and column 9, lines 49-53 disclose opening all of the valves simultaneously. More specifically, all of the elements 23a-23d are activated.

Regarding claim 3, Fig. 2 discloses integrating an outlet opening (including 57) for the compressed air into the actuator (including 52).

Regarding claim 4, Figs. 2 and 6 disclose disposing the suction ducts (including 71) and the valves (Fig. 6) in an exposure drum (16); and disposing the actuator (including 52) outside the exposure drum.

Regarding claim 5, the Abstract discloses that the exposer (Fig. 1) records on printing plates.

Regarding claim 6, Figs. 1-3 and 6 show an apparatus for controlling vacuum distribution in an exposer (Fig. 1) for recording printing originals, comprising:

a supporting surface (Fig. 2) for receiving a recording material (18) of a printing original, the supporting surface (Fig. 2) having suction grooves (44) machined therein and through the suction grooves (44) the recording material is attracted to the supporting surface (Fig.2) by suction;

suction ducts (including 71) connected to the suction grooves (44);

valves (Fig. 6) disposed in a valve block (cross-hatched wall in Fig. 2), the valves (Fig. 6) for opening and closing the suction ducts (including 71), each of the valves (Fig. 6) having a respective piston rod (near 89) and a respective piston (column 11, line 33), the valves (Fig. 6) being opened by compressed air (column 9, lines 42-55) acting on the pistons; and

a mechanical actuator (including 52) configured to selectively push the piston rods into the valve block for closing selected ones of the valves (Fig. 6).

Regarding claim 7, Fig. 6 shows that that valves (Fig. 6) each contain: a bush (including 87) having a wall with drilled holes formed therein, the piston rod being displaced in the bush (including 87).

Regarding claim 8, Figs. 6 shows that the piston rod (near 89) closes and opens the drilled holes.

Regarding claim 9, Figs. 1-3 and 6 show that the mechanical actuator (including 52) closes a respective one of the valves (Fig. 6) with a force (e.g., air supplied to line 41) acting on the piston rod.

Regarding claim 10, Fig. 2 shows that the mechanical actuator (including 52) has an outlet opening (57) formed therein for channeling the compressed air.

Regarding claim 11, as best understood, Fig. 6 shows a valve block having a negative-pressure duct (near 40) and a compressed-air duct (near 41 or near 42) formed therein, the valves connected to the negative-pressure duct and the compressed-air duct.

Alternatively, with regard to claim 11, Fig. 2 and column 11, lines 60-61 disclose a valve block (53) having a negative-pressure duct (41) and a compressed-air duct (42) formed therein, the valves connected to the negative-pressure duct and the compressed-air duct.

Regarding claim 12, the Abstract discloses the exposser (Fig. 1) records on printing plates.

Response to Arguments

5. Applicant's arguments filed 11/17/2006 have been fully considered but they are not persuasive.

Applicant argues that

The Helmstadter reference discloses a suction air control device for controlling suction air. Helmstadter discloses that valves are opened and close with a pneumatic force.

The reference does not show opening and closing the suction ducts by manipulating valves, the valves being closed by a force from a mechanical actuator, and the valves being opened by an action of compressed air on a piston in each of the valves, as recited in claim 1 of the instant application. The Helmstadter reference discloses that valves are pneumatically controlled. Helmstadter does not disclose closing a valve with a mechanical actuator. This is contrary to the invention of the instant application as claimed, which recites opening and closing the suction ducts by manipulating valves, the valves being closed by a force from a mechanical actuator, and the valves are opened by an action of compressed air on a piston in each of the valves.

The examiner disagrees. The Helmstadter reference discloses valves (Fig. 6) being closed by a force (e.g., compressed air from portion 57) from a mechanical actuator (including 52), and the valves (Fig. 6) being opened by an action of compressed air (column 9, lines 42-55) on a piston (column 11, line 33) in each of the valves (Fig. 6). Element 52 is moved by a piston arrangement, as best shown in Fig. 2. Thus, such arrangement is a mechanical actuator. Also, element 52 has a port (57) that provides compressed air (i.e., provides a force) to control lines (e.g., control lines 41) to close the valves. As such, the valves are closed by a force from a mechanical actuator, as claimed.

Next, applicant argues that

Claim 6 call for, *inter alia*:

the valves being opened by compressed air acting on the pistons, and a mechanical actuator configured to selectively push the piston rods into the valve block for closing selected ones of the valves.

The reference does not show the valves being opened by compressed air acting on the pistons, and a mechanical actuator configured to selectively push the piston rods into the valve block for closing selected ones of the valves, as recited in claim 6 of the instant application. The Helmstadter reference discloses that valves are pneumatically controlled. Helmstadter does not disclose closing a valve with a mechanical actuator. This is contrary to the invention of the instant application as claimed, in which the valves are opened by compressed air acting on the pistons, and a mechanical actuator is configured to selectively push the piston rods into the valve block for closing selected ones of the valves.

The examiner disagrees. The Helmstadter reference discloses valves (Fig. 6) being opened by compressed air (column 9, lines 42-55) acting on the pistons; and a mechanical actuator (including 52) configured to selectively push the piston rods into the valve block for closing selected ones of the valves (Fig. 6). Element 52 is moved by a piston arrangement, as best shown in Fig. 2. Thus, such arrangement is a mechanical actuator. Also, element 52 includes a port (57) that provides compressed air through control lines (e.g., control line 41) to thereby push piston rods into the valve block for closing selected ones of the valves. See e.g., Figs. 6 and 2 for the piston rods and the valve block, respectively. See also column 9, lines 4-20 for an explanation of selective closing of the valves. In other words, the mechanical actuator selectively pushes the piston rods via the compressed air supplied by the mechanical actuator. Thus, Helmstadter discloses valves being opened by compressed air acting on the

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pistons; and a mechanical actuator configured to selectively push the piston rods into the valve block for closing selected ones of the valves, as claimed.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

02/07/2007



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